

REMARKS

Reconsideration and further examination is respectfully requested.

Claims 1-4, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pardes (US Patent No. 4,137,651) in view of Marshall (US Patent No. 4,290,757). Regarding claim 1, Examiner points out that Pardes discloses a training simulator comprising a weapon unit equipped with an emitter unit 2 having a light emitter and a cordless firing event detection means adapted to be activated simultaneously by pulling the trigger of the weapon unit.

Upon close examination of Pardes it becomes clear that what is disclosed by Pardes is a weapon unit equipped just with a trigger-activated battery-powered laser module 2 but without any cordless firing event detection means. Pardes discloses a hit detection means 16 capable of detecting a laser beam fired from the weapon unit if the target on the screen has been hit. That hit detection means is a laser photodetector sensitive to the wavelength of the laser 3 (column 4, lines 52-63 of Pardes). Therefore, a successfully hit target is recognized by the system of Pardes by activation of that hit detection means 16. If the target has not been hit, the firing event is detected by activating an attempt detector means 20, which is also a photodetector for the same wavelength as the laser 3 but with a wide field of view to cover the entire screen (column 4, line 64 through column 5, line 12 of Pardes).

Therefore, Pardes fails to disclose any cordless firing event detection means as part of the weapon unit in parallel with the light emitter means as disclosed by the Applicant. Pardes also fails to disclose any means to activate the light emitter AND the cordless firing event detection means simultaneously upon pulling the trigger of the weapon system. Pardes further fails to disclose any cordless firing event detection sensor as part of the screen unit as disclosed by the Applicant. Finally, Pardes fails to disclose any means of transmitting the firing event signal from

the screen unit equipped with the cordless firing event detection sensor to the central computer of the system.

Marshall indeed shows a computer unit 37 designed to control the movement of the optical target on the screen and follow the aim of the marksman to determine a hit or miss. However, Marshall fails to disclose the cordless firing event detection means as part of the weapon unit as well as a cordless firing event sensor means as a part of the screen unit of the system. In addition, due to the lack of these elements, Marshall further fails to disclose a computer system adapted to accept a firing event signal generated by the firing event sensor of the screen unit upon pulling the trigger of the weapon unit.

As to claim 2, Pardes fails to disclose the any infrared light firing event emitters or receivers in the specification. Position 2 designates a laser module and positions 16 and 20 designate photodetectors capable of detecting the wavelengths of that laser module. Fig. 2C does not show any elements of the Pardes system but rather shows a chart illustrating laser gating pulses to allow for several weapon units to hit targets on the same screen at the same time. RF signal (not infrared!) transmitted by the central unit of the system sends out gating frequency pulses according to Pardes which allow individual laser modules to be activated during certain time intervals designated to each individual weapon unit only. That in turn allows the system to recognize which marksman has fired at a particular time interval allowed by the central control unit since other weapon units are forbidden to fire at the same time interval. That system is totally different from the Applicant's invention since the RF signal is generated by the central system of Pardes and transmitted to all weapon units. On the other side, according to Applicant's invention, the infrared light signal is generated by the weapon unit itself and is detected by the sensor of the screen unit so a signal is then generated and sent to the central computer for further processing.

As to claims 3-6, 8-10, the Applicant agrees with the position of the Examiner and cancels these claims.

Claims 11-15 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherburne (US Patent No. 4,163,328) in view of Marshall. As to claim 11, it has been amended to include a limitation of the mirror system "having a fixed position mirror and a rotating mirror" to further distinguish it from Sherburne and Marshall. The Sherburne and Marshall devices have only one mirror and the amended claim 11 calls now for at least one fixed position mirror and one rotating mirror.

Claims 12-15, 19 and 21 are canceled by the Applicant in view of the Examiner's arguments as stated.

Claim 20 is left pending due to the arguments above regarding the presence in the Applicant's invention of the cordless firing event detection means.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Boris Leschinsky, Applicants' Agent at 201-262-0051 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date

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